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On Feb. 1, 2002

TOWNSEND and TOWNSEND and CREW LLP

By: Kevin L. McNeill

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re application of:

Simon Armour et al.

Application No.: 09/913,840

Filed: January 24, 2000

For: OFDM RECEIVER WITH  
ADAPTIVE EQUALISER

Examiner:

Art Unit:

INFORMATION DISCLOSURE  
STATEMENT UNDER 37 CFR §1.97 and  
§1.98

Assistant Commissioner for Patents  
Washington, D.C. 20231

Sir:

The references cited on attached form PTO/SB/08A and PTO/SB/08B are being called to the attention of the Examiner. Copies of the references are enclosed. Also enclosed is a copy of the search report corresponding to the British patent application and the International Search Report corresponding to the PCT application. It is respectfully requested that the cited references be expressly considered during the prosecution of this application, and the references be made of record therein and appear among the "references cited" on any patent to issue therefrom.

Please type a plus sign (+) inside the box → ☐

Approved through 10/31/2002. OMB 0651-0031

U.S. Patent and Trademark Office U.S. DEPARTMENT OF COMMERCE

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**TRANSMITTAL  
FORM**

(to be used for all correspondence after initial filing)

Application Number	09/913,840
Filing Date	January 24, 2000
First Named Inventor	Simon Armour
Group Art Unit	
Examiner Name	
Attorney Docket Number	081326-000000US

Total Number of Pages in This Submission

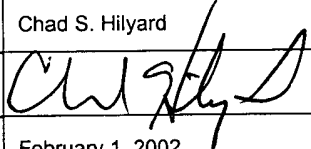
**ENCLOSURES (check all that apply)**

- |  |  |   |
|--|--|---|
| <input type="checkbox"/> Fee Transmittal Form<br><input type="checkbox"/> Fee Attached<br><input type="checkbox"/> Amendment / Response<br><input type="checkbox"/> After Final<br><input type="checkbox"/> Affidavits/declaration(s)<br><input type="checkbox"/> Extension of Time Request<br><input type="checkbox"/> Express Abandonment Request<br><input checked="" type="checkbox"/> Information Disclosure Statement<br><input type="checkbox"/> Certified Copy of Priority Document(s)<br><input type="checkbox"/> Response to Missing Parts/ Incomplete Application<br><input type="checkbox"/> Response to Missing Parts under 37 CFR 1.52 or 1.53 | <input type="checkbox"/> Assignment Papers (for an Application)<br><input type="checkbox"/> Drawing(s)<br><input type="checkbox"/> Licensing-related Papers<br><input type="checkbox"/> Petition Routing Slip (PTO/SB/69) and Accompanying Petition<br><input type="checkbox"/> Petition to Convert to a Provisional Application<br><input type="checkbox"/> Power of Attorney, Revocation Change of Correspondence Address<br><input type="checkbox"/> Terminal Disclaimer<br><input type="checkbox"/> Request for Refund<br><input type="checkbox"/> CD, Number of CD(s) | <input type="checkbox"/> After Allowance Communication to Group<br><input type="checkbox"/> Appeal Communication to Board of Appeals and Interferences<br><input type="checkbox"/> Appeal Communication to Group (Appeal Notice, Brief, Reply Brief)<br><input type="checkbox"/> Proprietary Information<br><input type="checkbox"/> Status Letter<br><input checked="" type="checkbox"/> Other Enclosure(s) (please identify below):<br>Return Postcard<br>Copies of nine (9) cited references |
|--|--|---|

Remarks

The Commissioner is authorized to charge any additional fees to Deposit Account 20-1430.


**SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT**

Firm and Individual name	Townsend and Townsend and Crew LLP Chad S. Hilyard	Reg. No. 40,647
Signature		
Date	February 1, 2002	

**CERTIFICATE OF MAILING**

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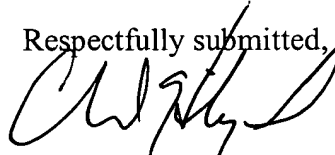
Typed or printed name	Nina L. McNeill		
Signature		Date	February 1, 2002

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As provided for by 37 CFR 1.97(g) and (h), no inference should be made that the information and references cited are prior art merely because they are in this statement and no representation is being made that a search has been conducted or that this statement encompasses all the possible relevant information.

Applicant believes that no fee is required for submission of this statement, since it is being submitted prior to the first Office Action. However, if a fee is required, the Commissioner is authorized to deduct such fee from the undersigned's Deposit Account No. 20-1430. Please deduct any additional fees from, or credit any overpayment to, the above-noted Deposit Account.

Respectfully submitted,



Chad S. Hilyard  
Reg. No. 40,647

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Substitute for form 1449A/PTO

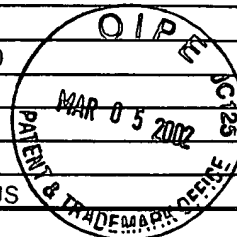
**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**

(use as many sheets as necessary)

Sheet 1 of

**Complete if Known**

Application Number	09/913,840
Filing Date	January 24, 2000
First Named Inventor	Simon Armour
Art Unit	
Examiner Name	
Attorney Docket Number	081326-000000US

**U.S. PATENT DOCUMENTS**

Examiner	Cite No. <sup>1</sup>	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number Kind Code <sup>2</sup> (if known)			
	AA	US-5,285,474	2/8/94	Chow et al.	
	AB	US-5,796,814	8/18/98	Brajaj et al.	
	AC	US-			
	AD	US-			
	AE	US-			
	AF	US-			
	AG	US-			
	AH	US-			
	AI	US-			
	AJ	US-			
	AK	US-			
	AL	US-			
	AM	US-			
	AN	US-			
	AO	US-			
	AP	US-			
	AQ	US-			
	AR	US-			
	AS	US-			
	AT	US-			

**FOREIGN PATENT DOCUMENTS**

Examiner Initials*	Cite No. <sup>1</sup>	Foreign Patent Document			Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T <sup>6</sup>
		Country Code <sup>3</sup>	Number <sup>4</sup>	Kind Code <sup>5</sup> (if known)				
	AU	EP	0 797 814 A1		24/9/97			
	AV ✓	UK	GB 2 325 825 A					
	AW ✓	UK	GB 2 326 070 A					
	AX							
	AY							
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<sup>1</sup> Unique citation designation number. <sup>2</sup> See attached Kinds of U.S. Patent Documents. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. <sup>6</sup> Applicant is to place a check mark here if English language Translation is attached.

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Substitute for form 1449A/PTO

**INFORMATION DISCLOSURE  
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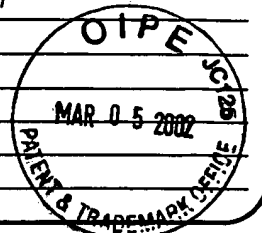
Sheet

2

of

**Complete if Known**

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		Country Code <sup>3</sup>	Number <sup>4</sup>	Kind Code <sup>5</sup> (if known)				
	BB							

Examiner  
SignatureDate  
Considered

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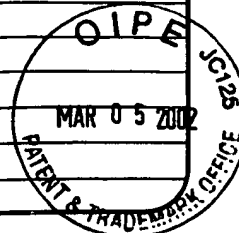
<sup>1</sup> Unique citation designation number. <sup>2</sup> See attached Kinds of U.S. Patent Documents. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. <sup>6</sup> Applicant is to place a check mark here if English language Translation is attached.

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Substitute for form 1449B/PTO  <h2 style="text-align: center;">INFORMATION DISCLOSURE STATEMENT BY APPLICANT</h2> <p style="text-align: center;">(use as many sheets as necessary)</p>		<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th colspan="2" style="text-align: center;">Complete if Known</th> </tr> <tr> <td style="width: 50%;">Application Number</td> <td>09/913,840</td> </tr> <tr> <td>Filing Date</td> <td>August 16, 2001</td> </tr> <tr> <td>First Named Inventor</td> <td></td> </tr> <tr> <td>Art Unit</td> <td></td> </tr> <tr> <td>Examiner Name</td> <td></td> </tr> <tr> <td>Attorney Docket Number</td> <td>081326-000000US</td> </tr> </table>		Complete if Known		Application Number	09/913,840	Filing Date	August 16, 2001	First Named Inventor		Art Unit		Examiner Name		Attorney Docket Number	081326-000000US
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Art Unit																	
Examiner Name																	
Attorney Docket Number	081326-000000US																
Sheet	3	of															



OTHER PRIOR ART -- NON PATENT LITERATURE DOCUMENTS			
Examiner Initials *	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
	BC	ARMOUR, S. et al., "Pre-FFT equalizer design for OFDM," Electronics Letters, Vol. 35, No. 7, pp. 539-540, April 1, 1999	
	BD	ARMOUR, S., et al, "Performance Analysis of a Pre-FFT Equalizer Design for DVB-T," IEEE Transactions on Consumer Electronics, Vol. 45, No. 3, pp. 544-552, August 1999	
	BE	ARMOUR, S., et al., "Performance Analysis of a Pre-FFT Equalizer Design for DVB-T," Digest of Technical Papers, Int'l Conference on Consumer Electronics, pp. 72-73, June 24, 1999	
	BF	ARMOUR, S., et al., "The Impact of FFT Size on the Performance of a Combined OFDM-Equalization Radio Modem," IEEE VTS 50 <sup>th</sup> Vehicular technology Conference, Vol. 3, pp. 1506-1510, 1999	
	BG		
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